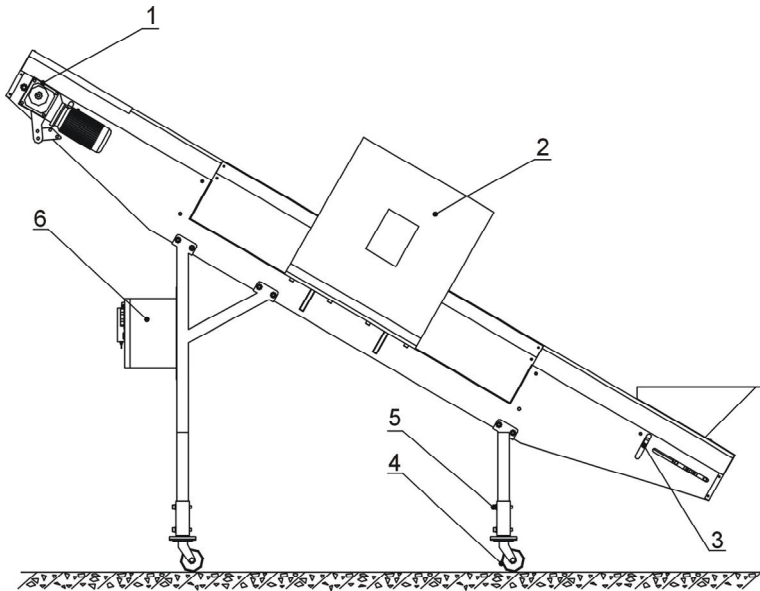


2. Structural Features and Working Principle

2.1 Function Description

PNL-MS horizontal belt conveyor with metal detector is a device which can detect the metal contained in the material during conveying and simultaneously activate the alarm. It is suitable for not only working together with Shini's granulator, such as SG-36, SG-43, SG-43, SG-50 and SGS series, but also working with other series of belt conveyors. PNL-MS series feature reliable performance, easy operation and convenient height adjustment upon customer's requirements.

2.1.1 Working Principle



Parts Name:

- | | | | |
|-------------------|-------------------|------------------|-----------|
| 1. Gear motor | 2. Metal detector | 3. Adjusting nut | 4. Castor |
| 5. Adjusting bolt | 6. Control box | | |

Picture 2-1: Working Principle

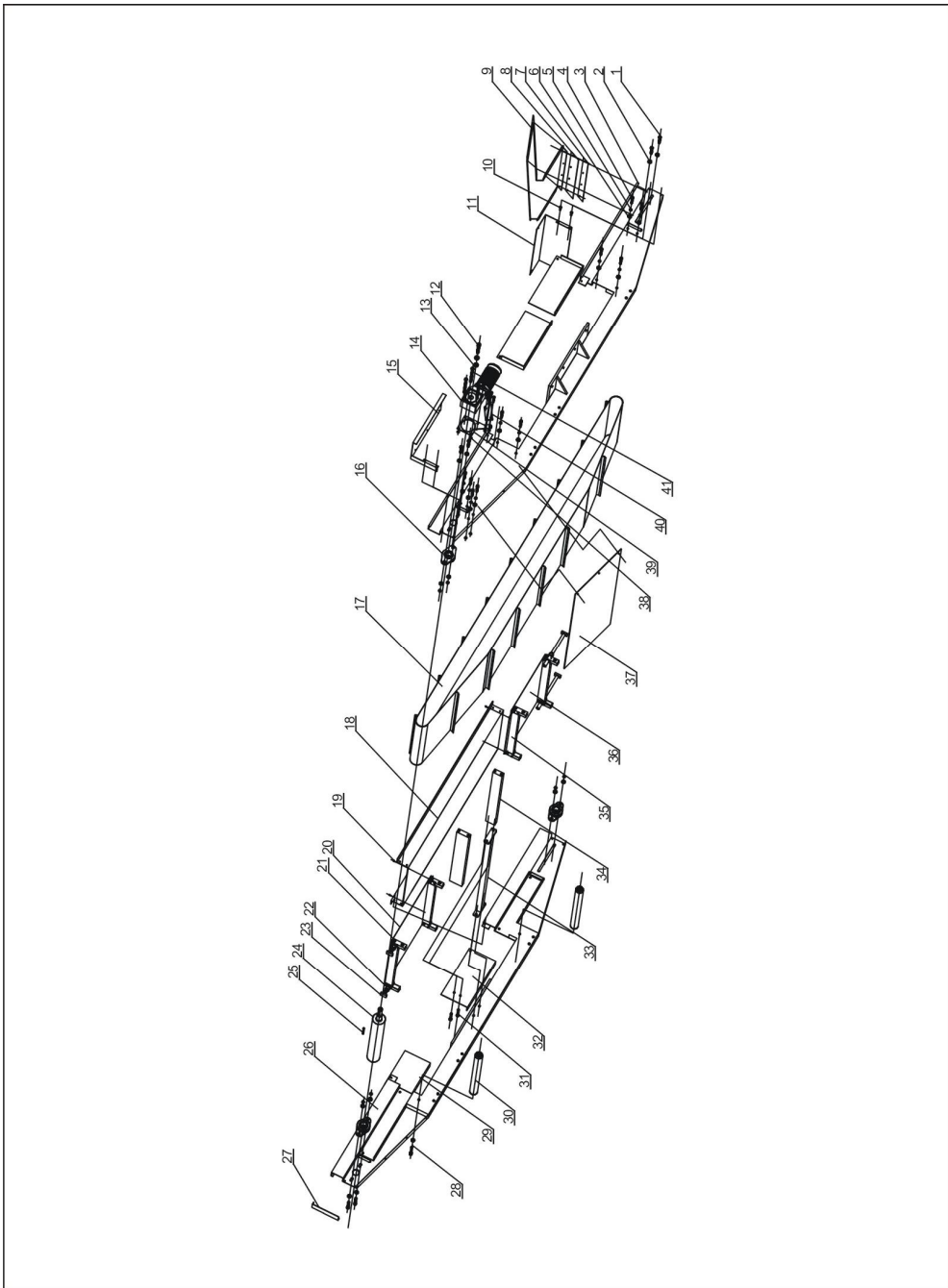
Working principle description:

Material is conveyed by the conveyor belt which is driven by the gear motor (1). The metal detector (2) stops the gear motor (1) and gives alarm by sending out a signal when material contains metals passing by the detector (2). The gear

motor restarts after removing the metals and pressing the reset switch on the control box (6). The adjusting nut is available for centralizing and tightening the conveyor belt. Customers also can adjust the height of the conveyor by adjusting bolt (3). Castors (4) make the conveyor easy to move.

2.2 Exploded View

2.2.1 Exploded View of Main Frame



Note: Please refer to 2.2.2 material list about the parts code.

Picture 2-2: Exploded View of Main Frame

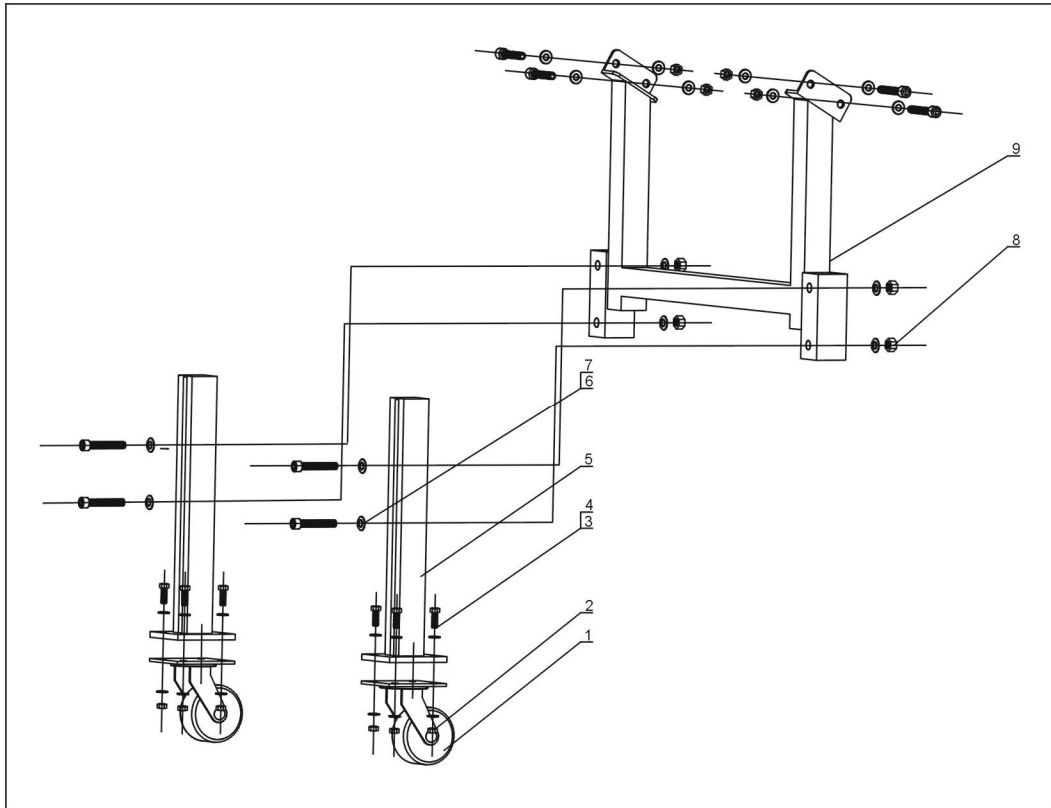
2.2.2 Parts List of Main Frame

Table 2-1: Parts List of Main Frame (PNL-MS-L3500/L4500)

No.	Name	Part No.	No.	Name	Part No.
1	Hexagon bolt	YW60144500000	22	Hexagon nut	YW64200200000
2	Flat washer	YW66142700000	23	Adjusting bolt	-
3	Left side plate	-	24	Driving shaft	-
4	Inner hexagon screw	YW61081600000	25	Flat key	-
5	Spring washer	YW65008000100	26	Right side plate	-
6	Flat washer	YW66082200100	27	Top right baffle-plate	-
7	Baffle pressing block	-	28	Inner-hexagon screw	YW61122500000
8	Baffle-leather	-	29	Side cover plate 2	-
9	Material collector	-	30	Driven shaft	-
10	Hexagon self-tapping screw	-	31	Plastic hexagon bolt	-
11	Lower baffle-plate	-	32	Side cover plate 1	-
12	Inner hexagon screw	YW61103000000	33	Bottom cross beam	-
13	Circlip for hole	YW69003000000	34	Fritch	-
14	Gear motor	-	35	Beam 1 Assembly	-
15	Top left baffle-plate	-	36	Lower bottom plate	-
16	Bearing base	-	37	Bottom baffle-plate	-
17	Conveying belt	-	38	Hexagon nut	YW64001000100
18	Middle bottom plate	-	39	Gear motor fixing plate 1	YW64200200000
19	Cross recessed tapping screw	-	40	Gear motor fixing plate 2	-
20	Top bottom plate	-	41	Hexagon nut	-
21	Beam 2 assembly	-			

* means possible broken parts. ** means easy broken parts, and spare backup is suggested. Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

2.2.3 Exploded View of Bottom Frame 1



Picture 2-3: Exploded View of Bottom Frame 1

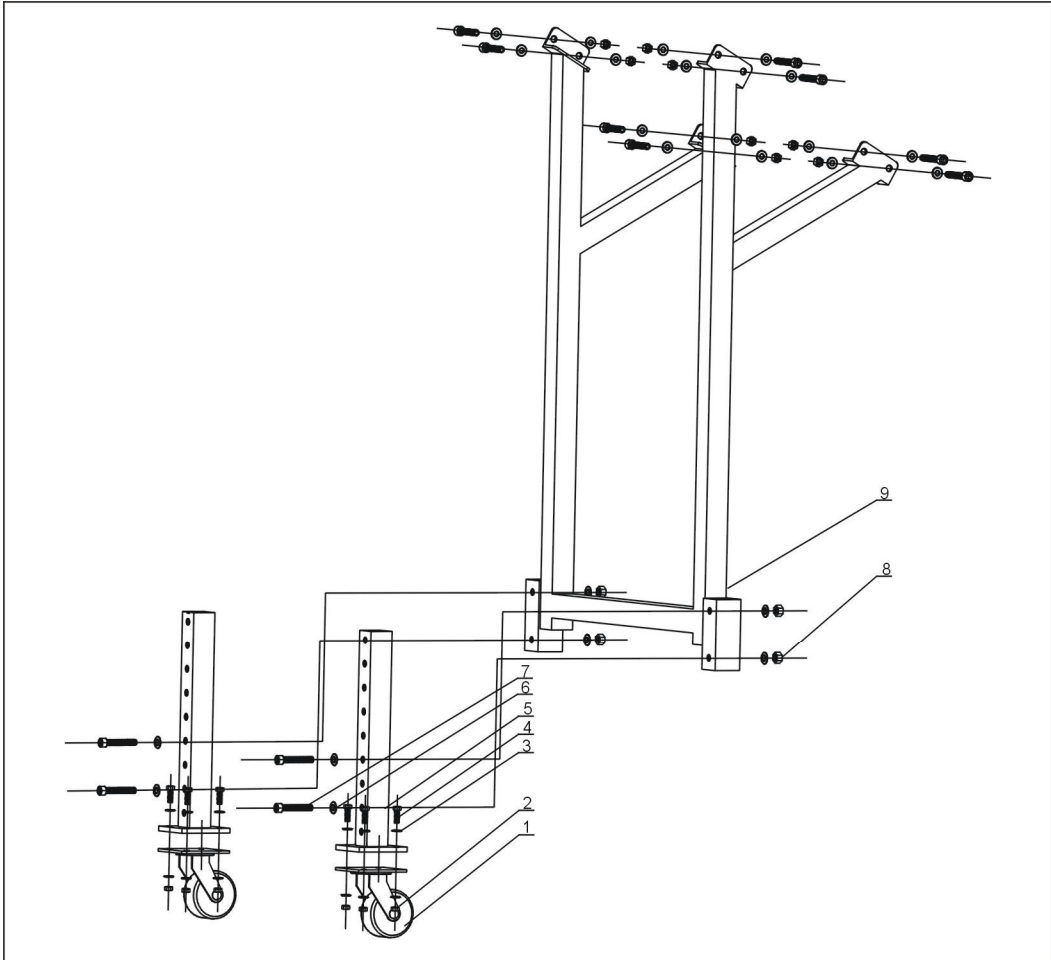
2.2.4 Parts List of Bottom Frame 1

Table 2-2: Parts List of Bottom Frame 1 (PNL-MS-L3500/L4500)

No.	Name	Part no.	No.	Name	Part no.
1	Flange type mounting castor with double brakes	YW03441090000	6	Flat washer	YW66142700000
2	Hexagon nut	YW64001000200	7	Inner hexagon bolt	YW61128000000
3	Flat washer	YW66181000000	8	Lock nut	YW64001200000
4	Hexagon bolt	YW60103000000	9	Top frame of bottom frame 1	-
5	Stand of bottom frame 1	YW03441090000			

* means possible broken parts. ** means easy broken parts, and spare backup is suggested. Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

2.2.5 Exploded View of Bottom Frame 2



Picture 2-3: Exploded View of Bottom Frame 2

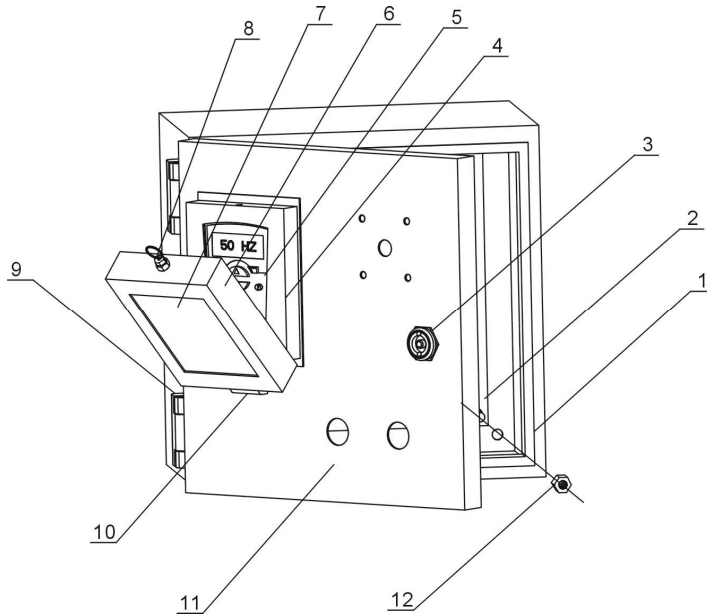
2.2.6 Parts List of Bottom Frame 2

Table 2-2: Parts List of Bottom Frame 2 (PNL-MS-L3500/L4500)

No.	Name	Part no.	No.	Name	Part no.
1	Flange type mounting castor with double brakes	-	6	Flat washer	YW66142700000
2	Hexagon nut	YW64001000200	7	Inner hexagon bolt	YW61128000000
3	Flat washer	YW66181000000	8	Lock nut	YW64001200000
4	Hexagon bolt	YW60103000000	9	Top frame of bottom frame 2	-
5	Stand of bottom frame 1	-			

* means possible broken parts. ** means easy broken part. and spare backup is suggested. Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.

2.2.7 Exploded View of Main Control Box



Picture 2-5: Exploded View of Main Control Box

2.2.8 Parts List of Main Control Box

Table 2-3: Parts List of Main Control Box (PNL-MS-L3500/L4500)

No.	Name	Part no.	No.	Name	Part no.
1	Control box	-	7	Monitor plate	-
2	Electric components fixing plate	-	8	Located rod (without lock)	-
3	Door lock with long baffler	YW00000000100	9	Hinge with O-ring and zinc plating-white	-
4	Seal ring of small control box	-	10	Hinge with O-ring and zinc plating-white	-
5	Remote control panel	YE81040400000	11	Control box cover	-
6	Remote control panel cover	-	12	Hexagon nut M8	YW64000800200

* means possible broken parts. ** means easy broken part. and spare backup is suggested. Please confirm the version of manual before placing the purchase order to guarantee that the item number of the spare part is in accordance with the real object.